

pulmonary circulation was understood so far as above described, but its relation to the systemic circulation was unknown. The action of the heart as a propulsive organ was not recognized. It was not until 1628 that Harvey announced his views to the world by publishing his treatise *De Motu Cordis et Sanguinis*. His conclusions are given in the following celebrated passage:

"And now I may be allowed to give in brief my view of the circulation of the blood, and to propose it for general adoption. Since all things, both argument and ocular demonstration, show that the blood passes through the lungs and heart by the auricles and ventricles, and is sent for distribution to all parts of the body, where it makes its way into the veins and pores of the flesh, and then flows by the veins from the circumference on every side to the centre, from lesser to the greater veins, and is by them finally discharged into the vena cava and right auricle of the heart, and this in such a quantity, or in such a flux and reflux, thither by the arteries, hither by the veins, as cannot possibly be supplied by the ingestor, and is much greater than can be required for mere purposes of nutrition, it is absolutely necessary to conclude that the blood in the animal body is impelled in a *circle*, and is in a state of ceaseless motion; that this is the act or function which the heart performs by means of its pulse; and that it is the sole and only end of the motion and contraction of the heart." (Book X, ch. xiv, p. 68.)

The only figures included by Harvey in his great book were taken from his master's *De Venarum Ostiolis*.

(To be continued)

CLINICAL NOTES AND CASE REPORTS

A NEW METHOD OF PROSTATECTOMY

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THE following preliminary notes on a new procedure for prostatectomy are submitted:

Procedure.—A No. 18 Fr. sound is inserted into the bladder and a suprapubic incision is made over the "Cave of Retzius," which is extravescicular. The bladder is mobilized anteriorly and displaced upward, which exposes the capsule of the prostate gland. The capsule of the prostate is incised for one-half an inch longitudinally, beginning one-quarter of an inch below the bladder. Two hemostats are inserted transversely on each side of the capsule, which is incised between the hemostats. The inferior portion of the capsule is sutured to prevent bleeding, and the hemostats removed. The superior portion of the capsule is displaced upward, carrying the bladder with it, thereby exposing the prostate. The upper two-thirds of the prostate is freed from its capsule by blunt dissection with the finger. The prostatic lobes are removed separately by excision.

Care must be used to avoid accidental opening into the prostatic urethra, which may be a third of an inch in diameter and fusiform in shape in this region.

The bladder is returned to its normal position and sutured to the posterior surface of the pubes. The abdominal wall is closed in layers. A retention catheter is allowed to remain for several days for urinary drainage and lavage. The advantages of the operation are:

1. There is no solution of the continuity of the urethra.
2. Drainage of the surgical wound is unnecessary.
3. Damage to the seminal vesicles is avoided.
4. The ejaculatory ducts are preserved.
5. Absence of shock and hemorrhage.
6. Ease of adequate exposure of prostate.
7. Hospitalization is shortened.

PHYSOMETRA

REPORT OF CASE

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PHYSOMETRA, or gas in the cavity of the uterus, is a rather unusual and startling occurrence. It has been described by Kelly¹ as follows:

"Enlargement of the uterus sometimes follows a cervical operation or occurs in the course of cervical disease, and should always be borne in mind. While this may be due to the extension of growth, it is also frequently the result of a stenosis, with the retention of blood, pus, or gas (physometra), or a combination of these. We are seeing more of these heretofore rare affections since the advent of radium in cervical carcinoma. If a patient has lower median pain she has not felt before some rise in temperature, it is often well to pass an instrument, say a curved artery forceps into the uterus and open it, watching to see whether there is any discharge. A physometra is often explosive in its escape. If there is retention it must be given free exit and watched from time to time."

Hector² states:

"... Most of the reported cases of physometra (gas in the uterine cavity) have been associated with septic abortions or other complications of the puerperium. In such cases the symptoms are grave and the issue usually fatal. The organisms concerned are frequently *B. welchii*, anaërobic streptococci, and *B. coli*." Operation in the case quoted by him, "showed a uterus containing multiple fibroids of varying sizes, some cystic, some calcareous. The uterine cavity was distended and fluctuating. On opening the uterine cavity a considerable quantity of gas escaped with a 'hiss,' followed by one and a half pints of pus with the odor of *B. coli*." ... there was also present an adenocarcinoma of the corpus.

When the cervical canal is occluded,³ the uterine cavity is gradually filled with pent-up secretions. If putrefaction with gas has occurred, it is called physometra.

Sleeman⁴ gives an uncommon case of physometra, referring to eight others of his own notice, with the clinical picture of *B. welchii* septicemia, extreme anemias (680,000 red cells per cubic millimeter) and in which particular case instrumental interference was suspected but unproven, with a rapidly fatal outcome.